

**another only at certain places so that air cushions covered by dome-like regions of the upper layer are formed**

Patent Assignee: SYMALIT AG (SYMA-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 20102194	U1	20010510	DE 2001U2002194	U	20010208	200132 B

Priority Applications (No Type Date): DE 2001U2002194 U 20010208

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 20102194	U1	10	B60R-013/02	

Abstract (Basic): **DE 20102194 U1**

**NOVELTY** - The lining of an automobile roof comprises two layers (1, 2) and (1', 2') which are welded to one another only at certain places (3) so that air cushions covered by dome-like regions of the upper layer (1, 2) are formed.

**USE** - For lining of automobile roofs.

**ADVANTAGE** - The lining offers protection to automobile occupants as a result of its cushioning properties. It also functions as a sound absorber.

**DESCRIPTION OF DRAWING(S)** - The drawing shows a cross section through the proposed roof lining.

Outer fiber reinforced thermoplastic material (1, 1')

Inner closed-cell foam material (2, 2')

Welds (3)

Air cushions (4)

pp; 10 DwgNo 1/3

Technology Focus:

**TECHNOLOGY FOCUS** - POLYMERS - Each of the two layers forming the inner lining of the automobile roof consists a fiber reinforced thermoplastic outer layer and a closed-cell foam inner layer of polyolefine.

Title Terms: LINING; AUTOMOBILE; ROOF; COMPRISE; TWO; LAYER; WELD; ONE; PLACE; SO; AIR; CUSHION; COVER; DOME; REGION; UPPER; LAYER; FORMING

Derwent Class: A95; Q17

International Patent Class (Main): B60R-013/02

International Patent Class (Additional): B60R-021/04

File Segment: CPI; EngPI

Manual Codes (CPI/A-N): A99-A

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?t s7/9/all

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DIALOG(R)File 351:Derwent WPI

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009982740 **\*\*Image available\*\***

WPI Acc No: 1994-250451/ **199431**

Related WPI Acc No: 1995-312625

XRAM Acc No: C94-113894

XRPX Acc No: N94-197933

**Multilayer material for vehicle trim - has covered foam bonded to carrier layer contg. natural fibres in a binder**

Patent Assignee: R & S STANZTECHNIK GMBH (ROSP )

Inventor: SPENGLER E M

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4403977	A1	19940811	DE 4403977	A	19940209	199431 B
DE 9422147	U1	19980618	DE 94U22147	U	19940209	199830
			DE 4403977	A	19940209	

Priority Applications (No Type Date): DE 4303611 A 19930209

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4403977	A1		6	B32B-027/04	
DE 9422147	U1			B32B-027/04	application DE 4403977

Abstract (Basic): DE 4403977 A

A multilayered body, esp. for vehicle trim, has a carrier layer (4), with pref. a soft resilient intermediate layer (3) and a decorative layer (2). The carrier layer (4) has natural fibres (5) as a filler and, additionally, recyclable thermoplastic synthetic material as a binder.

Pref. the carrier layer (4) is built up of three layers comprising a core (7) and two cover layers (8,9). The core (7) contains 50 - 70 (pref. 50)%, thermoplastic binder, with the remainder natural fibres or glass fibres. The cover layers (8,9) contain more binder, pref. 70%. The layers of the carrier (4) are needle punched together and then moulded in a press with the other layers to give components about 5 mm thick.

USE/ADVANTAGE - For moulded, self-supporting vehicle trim components such as roof or door linings. The material has improved stiffness during mfr. and can be easily recycled.

Dwg.1/2

Title Terms: MULTILAYER; MATERIAL; VEHICLE; TRIM; COVER; FOAM; BOND; CARRY; LAYER; CONTAIN; NATURAL; FIBRE; BIND

Derwent Class: A95; P73; Q17

International Patent Class (Main): B32B-027/04

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File Segment: CPI; EngPI

Manual Codes (CPI/A-N): A11-C03; A12-T04B

Polymer Indexing (PS):

<01>

\*001\* 017; P0000; S9999 S1309-R; S9999 S1434

\*002\* 017; K9574 K9483; K9701 K9676; Q9999 Q7307; Q9999 Q9234 Q9212; Q9999 Q9289 Q9212; Q9999 Q7830; B9999 B4079 B3930 B3838 B3747; N9999 N6906; N9999 N6246; N9999 N7192 N7023; N9999 N6600; B9999 B5243-R B4740; Q9999 Q7829 Q7818; ND01

<02>

\*001\* 017; H0317; S9999 S1434

\*002\* 017; K9892; K9518 K9483; K9574 K9483; K9701 K9676; Q9999 Q7307; Q9999 Q9234 Q9212; Q9999 Q9289 Q9212; Q9999 Q7830; B9999 B4079 B3930 B3838 B3747; N9999 N6906; N9999 N6246; N9999 N7192 N7023; N9999 N6600; B9999 B5243-R B4740; Q9999 Q7829 Q7818; ND01

\*003\* 017; G2891 D00 Si 4A; A999 A419; S9999 S1070-R; A999 A771

<03>

\*001\* 017; R24078 R01852 G3634 G3623 D01 D03 D11 D10 D23 D22 D31 D42 D50 D86 F24 F29 F26 F34 H0293 P0599; P0599; S9999 S1070-R; A999 A782; A999 A419

Derwent Registry Numbers: 5102-U; 5214-U

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014081017 \*\*Image available\*\*

WPI Acc No: 2001-565231/200163

XRAM Acc No: C01-167727

XRPX Acc No: N01-420813

**Fibrous material lining for reducing noise in motor vehicles, comprises hollow elastic members embedded in it**

Patent Assignee: SAI AUTOMOTIVE SAL GMBH (SAIA-N);

SOMMER-ALLIBERT-LIGNOTOCK GMBH (SOMM-N)

Inventor: SCHUSTER D

Number of Countries: 094 Number of Patents: 003

Patent Family: